

[0303] The invention is not limited to these examples. For example, although the ring **710** was used in the above-mentioned example as a means to bundle the input-and-output parts **10a**, **10b**, . . . , the form to bundle is not limited in the shape of a ring.

[0304] Next, the control unit **12** will be explained. Control unit **12** has the following functions (FIG. 39):

[0305] (1) Control the contents of a display of the each of the above-mentioned input-and-output parts **10a**, **10b**, . . . based on the geometric change information acquired as an output from the input-and-output parts **10a**, **10b**, . . . input information.

[0306] (2) Control the contents of a display of each of the input-and-output parts **10a**, **10b**, . . . based on the detection result in the position change detection unit **700**.

[0307] (3) Control reading and writing of the data stored in the above-mentioned memory unit **500**.

[0308] (4) Control the contents of communication, a communication system, timing, etc. in the above-mentioned communication unit **600**,

[0309] (5) In addition, it is for controlling predetermined operation of apparatus.

[0310] In addition to the function which was explained with reference to the fifth and sixth example, the contents of a display of the each of the input-and-output parts **10a**, **10b**, . . . , based on the detection result in the above-mentioned position change detection unit **700**. Specifically according to the result of page turning over detected by the position change detection unit **700**, the display of the input-and-output part which is in the upper part most now is updated, for example.

[0311] According to the display input system in this example explained above, a user **200** has the same feeling as the case where the word book of the paper is operated, and can operate the display input system in this example. That is, even for persons who do not know the concept (WIMP metaphor) of the conventional computer, it becomes possible to operate a display input system intuitively with the feeling to touch a word book of paper

MODIFICATION OF THE SEVENTH EXAMPLE

[0312] In the 7th example mentioned above, as shown in FIG. 39, the geometric change detection unit **300** and the data input part **50** are provided in the inside of the each of the input-and-output parts **10a**, **10b**, . . . , respectively. In contrast to this, the control unit **12** and the memory unit **500** can be shared like the communication unit **600**. That is, detection of a geometric change of two or more input-and-output parts **10a**, **10b**, . . . , and acquisition of input are acquirable with one geometric change detection unit **300** and the data input part **50**.

EIGHTH EXAMPLE

[0313] Next, the 8th example of a the invention will be explained. FIG. 42 is the whole display input system structure figure concerning this example. The display input system of this example has the structure to which the position Management Unit **802**, the position presentation part **804**, and the feedback part **806** were added in the fifth

example. The position Management Unit **802** manages the position of the information which is presented to the display unit **20**. The position presentation part **804** has the role which presents the position that is managed at the position Management Unit **802**.

[0314] The feedback part **806** has the role which feeds back by sound or vibration, when the above-mentioned position presentation part **804** top is touched by hand etc. Henceforth, the position Management Unit **802** and the position presentation part **804** and The feedback part **806** which are added in this example will be explained.

[0315] First, the position Management Unit **802** will be explained. The position Management Unit **802** manages the position of the information currently displayed on the display unit **20** now among all the information that should be displayed on the display unit **20**. For example, suppose that the 4th page of the novel which Consists of 9 pages is displayed on the display unit **20**. In this case, it manages like that number of page is 9, that the present position is the 4th page, that it is four ninths of the whole, etc.

[0316] Next, the position presentation part **804** will be explained. In the position presentation part **804**, the position managed at the above-mentioned position Management Unit **802** is shown on the above-mentioned display unit **20**. As the lower part of the above-mentioned display unit **20** was used and it was shown in FIG. 43A, the position presentation part **804** expresses a page in the shape of a tab, and presents it in the form which can imagine intuitively existence of all the number of pages, the present page position, and other pages etc. to a user **200**. Or as shown in FIG. 43B the image of accumulation of paper (also refer to FIG. 44) may be displayed on the left-hand side of the display unit **20**. Anyway, in the position presentation part **804**, the position of information currently displayed on the above-mentioned display unit **20**, such as existence of all the number of pages, the present page position, and other pages, is visually shown to a user **200** by the way a user **200** tends to imagine actual books etc.

[0317] Next, the feedback part **806** will be explained. The feedback part **806** feeds back by sound or vibration, when the above-mentioned position presentation part **804** top is touched by hand etc. Thus, a user **200** can understand intuitively the contents presented by the above-mentioned position presentation part **804** by the tactile sense, hearing, etc. Hereafter, although feedback by vibration will be explained as an example, feedback is not limited to this specific example.

[0318] In case the page of actual books is turned over, as shown in FIG. 44, page turning over is usually performed with a clatter by letting the finger of a hand slide in a part for the end of paper in many cases. Then, on the finger of a hand, the reader can know intuitively how many pages were turned over now by tactile feedback being carried out for every sheet by friction at the time of a page passing by turning-over operation. The feedback part **806** is for introducing this feeling into the paper type electric device of this example.

[0319] Vibration is generated, when it lets the finger of a hand slide on the above-mentioned position presentation part **804** and passes through the page boundary top which the above-mentioned position presentation part **804** shows, as